

REMARKS

This application has been amended so as to place it in condition for allowance at the time of the next Official Action.

The Official Action objects to the drawings for failing to identify drawing Figures 1-5 as prior art. Please note that applicants include herewith amended sheets including Figures 1-5. The only modification to each of the amended figures is the addition of the legend "PRIOR ART" to each. Reconsideration and withdrawal of this objection are therefore respectfully requested.

The Official Action also objects to the drawings for illustrating element 143 without identification in the specification, and for describing element 144 in the specification without illustrating such in the drawing figures. To remedy both of these issues, applicants have amended a paragraph on page 4 of the specification, the only paragraph that makes reference to element 144. In this paragraph, the erroneous "144" has been replaced with "143". Reconsideration and withdrawal of these objections are therefore respectfully requested.

The Official Action notes that incorporation of essential material in the specification by reference to another document is improper. Applicants note that no essential material has intentionally been incorporated by reference. However, if

the Examiner has identified one or more documents to which the present specification refers that the Examiner considers to represent essential material, applicants respectfully request identification of such, so that they may take the appropriate steps.

The Official Action rejects claims 4 and 5 under 35 USC §112, first paragraph, as failing to satisfy the enablement requirement. Specifically, the Official Action states that the specification does not disclose that the transparent layer (12) comprises a color material which contains a reducing material as recited.

Applicants note that, prior to the present amendment, claim 4 recited that the coloring material for the transparent base layer material contains a reducing material. However, the application as originally filed discloses that the transparent base layer 12 includes such reducing material, as in the last full paragraph on page 12, stating:

The transparent base layer 12 is formed by coating a solution of material over the transparent substrate 10. There is no limitation on the material for the base layer as long as the transparent base layer 12 allows the transparent microspheres 14 to be partly embedded therein. The solution of material preferably contains a reducing material and, if necessary, various resins. In the case where the solution of material contains a reducing material and the solution of light absorbable material contains a coloring material, the coloring material is reduced by the reducing material to produce fine metal particles, in other words, to develop a color in the light absorbing layer 20. This is realized by selecting

proper conditions of forming these under and layers as will be described later.

To clarify claim 4, applicants have amended it to recite that the transparent base layer material comprises a reducing material. Reconsideration and withdrawal of this rejection are therefore respectfully requested.

The Official Action rejects claims 1-8 and 21-24 as indefinite. The basis for the inclusion of claim 4 has been addressed as discussed above in connection with the enablement rejection.

The basis for this rejection in each of independent claims 1 and 21 has also been remedied through amendment. In each claim, the "convertible" language has been eliminated, as a result of which reconsideration and withdrawal of this rejection are respectfully requested.

The Official Action rejects claims 1 and 2 under 35 USC §103(a) as being unpatentable over the prior art as described on pages 2-3 of the present specification in view of STAEHLE et al. Reconsideration and withdrawal of this rejection are respectfully requested for the following reasons:

At the outset, applicants note that the Official Action explicitly states that claim 3 is allowable but for its dependence from a rejected base claim. Please note that applicants have amended claim 1 to include the recitation of claim 3, namely, that the coloring material comprises silver

behenite. In light of the statement of allowability as to claim 3, the incorporation of such feature into claim 1, and the corresponding cancellation of claim 3, both independent claim 1 and claim 2, which depends therefrom, should be in condition for immediate allowance.

The Official Action rejects claims 21-24 under 35 USC §103(a) as being unpatentable over the prior art as described on page 3 of the present specification in view of STAEHLE et al. Reconsideration and withdrawal of this rejection are respectfully requested for the following reasons:

As the Official Action points out, the STAEHLE et al. reference describes a light absorbing layer 16. Such layer is described as comprising a thermoplastic or gelatin with a dye, a developed and fixed photographic emulsion, dopes or lacquers containing black dyes or pigments, dark colored varnishes, and asphalt varnish.

In the present invention, however, the light absorbing layer is formed by first depositing a solution layer of coloring material, and after such deposition, treating the solution to convert it into a layer of fine metal particles. This is specifically described on page 20 of the present application as originally filed, where it is stated:

Thereafter, a light absorbing layer 20 was formed by coating an aqueous solution of light absorbable material containing a seven weight proportion of silver behenite as a coloring material

and a 20 weight proportion of gelatin over the transparent base layer 12. The aqueous solution of light absorbable material was coated to a thickness of 15 μm . The product was heated at 120°C for 30 seconds to produce fine metal particles (metal silver particles) which formed a black layer having a thickness of 5 μm and cooled to a room temperature, thereby completing an optical diffusion film 6A(I).

In the particular embodiment described in this passage, the treating comprises heating at 120°C for 30 seconds, although the present invention is not so limited. In order to emphasize the difference between the present invention and the known prior art, including the admitted prior art and the reference specifically applied, applicants have amended claim 21 to recite the following two distinct steps:

forming a light absorbing layer over said transparent base layer leaving each said transparent microsphere partly bare by coating a solution layer of coloring material; and

after coating the solution layer, treating said solution layer of coloring material so as thereby to convert said solution layer of coloring material into a layer of fine metal particles as said light absorbing layer.

This set of features is neither taught nor suggested by the applied prior art, considered either individually or collectively. Reconsideration and withdrawal of this rejection are therefore respectfully requested.

The Official Action rejects claims 6-8 under 35 USC §103(a) as being unpatentable over the prior art as described on pages 2-3 of the present specification in view of STAEHLE et al.,

and further in view of ALTMAN. Reconsideration and withdrawal of this rejection are respectfully requested for the following reasons:

The Official Action offers the additional ALTMAN reference for its asserted teaching or suggestion of the dimension of the microspheres. However, irrespective of the ability of this reference to teach or suggest that for which it is offered, it fails to overcome the shortcomings of the STAEHLE et al. reference, as detailed in the analysis offered in connection with the rejection of claims 1 and 2. Accordingly, these claims are believed to be in condition for immediate allowance, at least by virtue of their ultimate dependence from amended claim 1.

Entry of the above amendments is earnestly solicited. Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.


Please charge the fee of \$198 for the 11 extra claims of any type and \$86 for the extra independent claim added herewith, to Deposit Account No. 25-0120.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following items:

- Replacement Sheets for Figures 1-5 of the drawings